

It takes a PHD to SUMO.

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Authors: Jamy Peng, Joanna Wysocka

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Public Summary:

Scientific Abstract:

PHD fingers and bromodomains are found in close proximity to each other in many chromatin-associated proteins and can functionally synergize. Recently, it has been demonstrated that the PHD finger of the KAP1 co-repressor functions as an E3 SUMO ligase for the adjacent bromodomain. This PHD-mediated SUMOylation stabilizes the association of the bromodomain with the chromatin modifiers SETDB1 and the nucleosome remodeling and deacetylation (NuRD) complex, thereby promoting establishment of the silent gene expression state.

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